

ABSTRACT

Light from a light source 10 is linearly polarized by a polarizer 11. Then it
5 propagates via a half-mirror 12 almost parallel to the normal to a reflective liquid-
crystal panel 13 and falls on the reflective liquid-crystal panel 13. The reflected light
reflected by the reflective liquid-crystal panel 13 is received by a detector 15 via the
half-mirror 12 and an analyzer 14. In this state, the reflective liquid-crystal panel 13
is rotated about an axis almost parallel to the normal to the reflective liquid-crystal
10 panel 13 and an angle (extinction angle) at which the output signal of detector 15
reaches minimum is measured. Then, the gap of the reflective liquid-crystal panel 13
is detected based on the measured extinction angle. It is also possible to measure the
output signals of detector 15 by arranging the analyzer 14 in a state in which the
transmission axis thereof is almost parallel to the polarization direction of the
15 incident light and a state in which it is almost perpendicular thereto and to detect the
gap of the reflective liquid-crystal panel 13 based on the measured signals.